U.S. Department of Energy
Office of Civilian Radioactive Waste Management

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Status of the DOE/OCRWM Program

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Principles

- Yucca Mountain approved by the President and Congress
- Yucca Mountain needed under any Fuel Cycle Scenario
- Proceeding on base case to deal with current & planned SNF/HLW inventory
- Not in a position today to specify an LA schedule; need to evaluate clean/canister design and fully factor in final EPA Radiation Protection Standard
- FY07 Budget supports Program on 4 important fronts
- Release of Technical Impacts Report
- Significant focus on improving organizational quality

Where We Are Going

- **Strong, defensible license application based on simplified design, licensing and operations using a clean-canistered approach**
- **Scientific and technical work that is traceable, transparent, and submitted with license application in compliance with quality assurance requirements**
- **Sandia National Laboratories to coordinate science work**
- **Use of independent reviews of work to ensure quality products**
- **Culture demonstrates responsibilities inherent in nuclear operations**

Program FY 2007 Objectives

- **Develop a License Application for submission to the NRC based on a safer and simpler approach to handling spent nuclear fuel and operating the repository known as the *clean-canistered* approach**
- **Develop a nuclear safety culture to standards that are required to conduct nuclear operations**
- **Develop the transportation infrastructure through necessary long-lead procurement actions, and continued rail line development**
- **Improve Yucca Mountain site infrastructure to ensure worker, regulator, and visitor safety**

FY 2007 Budget Request Summary

(Dollars in Millions)

	FY 2006 Approp	FY 2007 Request
Yucca Mountain	$ 305.9	$ 355.4
Transportation	19.9	67.7
Prog Mgmt & Integration/Prog Direction	119.7	121.4
Integrated Spent Fuel Recycling Facilities	49.5	0.0
TOTAL PROGRAM	495.0	544.5
Nuclear Waste Fund	99.0	156.4
Integrated Spent Fuel Recycling Facilities	49.5	0.0
Defense Nuclear Waste Disposal	346.5	388.1

Canister Approach, Program Redirection

- **Canister for Transportation, Aging and Disposal (TAD) minimizes handling of assemblies and limits need for multiple complex surface facilities**
- **Canister provides simplification in repository design, licensing, construction, and operation**
- **Spent nuclear fuel will be delivered to the repository primarily in canisters for spent fuel aging and emplacement underground**

FY 2007 Yucca Mountain Key Activities

- **Continue design of clean-canistered based repository facilities**
- **Work with industry to complete the preliminary design for the Transportation, Aging and Disposal (TAD) standard canister**
- **Conduct additional pre-closure and post-closure safety analysis work to support the design basis**
- **Update license application as clean-canistered modifications mature to reflect additional analytical and design work**
- **Continue upgrades to communication, emergency response and workplace infrastructure**

FY 2007 Transportation Key Activities

- **Issue Final Nevada Rail Alignment-Environmental Impact Statement and Record of Decision**
- **Develop impact mitigation plans along preferred alignment**
- **Continue the procurement process for truck and rail casks and associated specialized equipment and design & develop prototype of the rail car for security escorts**

- **Establish pilot emergency preparedness grant programs as part of NWPA Section 180(c) implementation**

FY 2007 Program Management & Integration Key Activities

- **Utilize Sandia National Laboratories to integrate scientific studies for the program**
- **Develop a nuclear safety culture, including improving configuration control, effective issue resolution processes, and encouraging employees to identify issues**
- **Continue project management improvements, including clear requirements definition and maintenance, and project control through earned value management system**

GNEP and Yucca Mountain

- **Yucca Mountain needed under any Fuel Cycle Scenario**
- **We are proceeding with our base case**
- **If the technology is proven and developed, GNEP could provide improvements to spent fuel disposal at a repository:**
  - **reduce the volume of waste**
  - **enhance thermal management**
  - **reduce the amount of long-lived radionuclides**
- **GNEP technologies could allow Yucca Mountain to satisfy all the requirements for spent nuclear fuel for this century, ensuring that Yucca Mountain is the only site needed for generations.**

Summary

- **Entering an important period for the nuclear industry and for the disposition of nuclear waste in America**
- **The Department is committed to the development of Yucca Mountain as a geologic repository**
- **GNEP has the potential to eliminate the added cost to ratepayers for multiple repositories**